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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,770	06/19/2008	Heinz Peter Raidt	06-447	1585
34704 7590 12/21/2010 BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510				
EXAMINER				
PLUMMER, ELIZABETH A				
ART UNIT		PAPER NUMBER		
3635				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/585,770

**Applicant(s)**

RAIDT ET AL.

**Examiner**

ELIZABETH A. PLUMMER

**Art Unit**

3635

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 19 June 2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Preliminary amendments to the specification received 12 July 2006 have been received and entered. Claims 16-40 are pending. This is a first Office action on the merits for application serial number 10/585,770 filed 12 July 2006.

#### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the composite panel including two pairs of parallel edges provided with coupling elements in the form of a groove and two other edges provided with a tongue must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The disclosure is objected to because of the following informalities: page 1, page 1 appears to contain a typographical error; the phrase "more than 0,2" should have a period rather than a comma.

Appropriate correction is required.

***Claim Objections***

3. Claims 37-40 objected to because of the following informalities: Regarding claim 37, claim 37 appears to contain a typographical error. Examiner suggests amending the phrase "reflection or more than" to "reflection of more than". In addition, claims 39 and 40 appear to also have typographical errors. Did applicant intend to claim .35% and .50% or .35 (alternatively written as 35%) or .5 (alternatively written as 50%)? For purposes of examination, it is assumed that applicant intended .35 and .5. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board

of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 24 recites the broad recitation at least 5 dB, and the claim also recites at least 10db and at least 15 dB, which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 16-19, 22-27, 31, 33, and 37-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Alderman (US Publication 2004/0000113).

a. Regarding claim 16, Alderman discloses a profiled member (14a) for insulating walls of building and floors (paragraph 3) including profiles embossed out (Fig. 3) on at least one side of a plane and a surface (paragraph 47 – comprises aluminum foil) having a degree of reflection of more than .2 (2% reflection) (see *Alufoil File* as evidence for citing the inherent property of

aluminum foil reflectivity being 98%) in order to increase thermal transmission resistance on either side of the plane.

b. Regarding claim 17, said plane has two sides and each side has an embossed profile (Fig. 3).

c. Regarding claims 18 and 19, the surface has a degree of reflection more than .35 and .5 (see Alufoil File for citing the inherent property of aluminum foil reflectivity being 98%).

d. Regarding claim 22, said profiled membrane has a smooth surface (Fig. 3).

e. Regarding claim 23, the surface (aluminum foil) reflects or absorbs electromagnetic radiation (see *Simple Device for Electromagnetic Interference Shielding Effectiveness Measurement* or *Electrical shielding* for citing the aluminum foil's inherent properties concerning electromagnetic radiation).

f. Regarding claims 24-26, the surface absorbs electromagnetic radiation by at least 15 dB (see *Simple Device for Electromagnetic Interference Shielding Effectiveness Measurement* or *Electrical shielding* for citing the aluminum foil's inherent properties concerning electromagnetic radiation).

g. Regarding claim 27, the surface is provided with a reflective coating (aluminum foil, paragraph 47).

h. Regarding claim 31, Alderman discloses a composite panel (Fig. 3) including a base body (22a) and a profiled membrane (14a) provided on the base

body, said profiled membrane comprising the limitations set forth and rejected in claim 16 as addressed above.

i. Regarding claim 33, a metal foil (12a) is disposed on a side of the base body facing the profiled membrane (paragraph 47).

j. Regarding claim 37, Alderman discloses a process for thermally insulating a floor (paragraph 3) comprising the steps of: providing a profiled membrane which includes profiles embossed out on at least one side of a plane (Fig. 3) and a surface (aluminum foil – paragraph 47) having a degree of reflection of more than .2 (see *Alufoil File* as evidence for citing the inherent property of aluminum foil reflectivity being 98%), arranging said profiled membrane on a surface to be insulated; and applying a base body (22a) to the profiled membrane (Fig. 3).

k. Regarding claim 38, said arranging step comprises arranged aid profiled member on a floor (paragraph 3).

l. Regarding claims 39 and 40, the profiled membrane has a surface with a degree of reflection of more than .35% and .50% (see *Alufoil File* as evidence for citing the inherent property of aluminum foil reflectivity being 98%).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 16, 20, 21, 28-30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alderman (US Publication 2004/0000113).

a. Regarding claim 16 and 20, Alderman discloses a profiled member (14a) for insulating walls of building and floors (paragraph 3) including profiles embossed out (Fig. 3) on at least one side of a plane and a surface (paragraph 47 – can comprise aluminum foil, alternative metal foils, metalized polyester, or metalized polyethylene) having a high degree of reflection, wherein the profiled member is made of plastic (metalized polyester or metalized polyethylene).

While Alderman does not disclose that the profiled membrane, when comprising plastic, has a degree of reflection more than .2 (2% reflection), Alderman teaches that the profile membrane can be made of any appropriate reflective surface (paragraph 47), and names aluminum foil as an example of what constitutes a reflective surface. As this one example has a very high reflectivity (see *Alufoil File* as evidence for citing the inherent property of aluminum foil reflectivity being 98%) in order to increase thermal transmission resistance on either side of the plane, it would have been a matter of obvious design choice to use a plastic having similar reflective properties in order to achieve the same thermally insulating properties. Furthermore, the types of plastics named by Alderman are metalized plastics, and the purpose of metalized plastics is to create a high reflectivity.

b. Regarding claims 21, 28, and 29, metalized plastics inherently contain metal pigments, which are also a type of color pigment.



- c. Regarding claim 30, the plastic surface of a profile membrane that is metalized plastic inherently has a coating of metal (see *How to Metalize Plastic* as evidence).
  - d. Regarding claim 32, Alderman discloses the claimed invention except for the base body being made of chipboard or plywood panel. It would have been a matter of obvious design choice to form the base body out of chipwood or plywood panel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Here, the chipwood or plywood panel can be selected for its availability as common construction materials.
10. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alderman (US Publication 2004/0000113) in view of Martensson et al. (US Patent 6,421,970).

Regarding claim 34, Alderman discloses the invention as claimed except for the base body including two pairs of parallel edges, and said two pairs of parallel edges comprising two neighboring edges provided with coupling elements in the form of a groove and two other edges provided with a tongue which fits into one of the grooves. However, it is notoriously well known in the art that boards can include two pairs of parallel edges, and said two pairs of parallel edges comprising two neighboring edges provided with coupling elements in the form of a groove and two other edges provided with a tongue which fits into one of the

grooves. For example, Martensson et al. teaches the method of connecting boards by having the boards include two pairs of parallel edges, and said two pairs of parallel edges comprising two neighboring edges provided with coupling elements in the form of a groove and two other edges provided with a tongue which fits into one of the grooves (Fig. 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alderman to use the known technique of connecting boards, such as taught by Martensson et al. in order to achieve predictable results which will improve installation of the panel and make the panels easier to use in a system of multiple boards.

11. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alderman (US Publication 2003/0061777).

a. Regarding claims 35 and 36, Alderman discloses a profiled member (10c,10d) for insulating walls of building and floors (paragraph 3) including profiles embossed out (Fig. 5,6,7) on at least one side of a plane and a surface (paragraph 5,9 – can comprise aluminum foil, alternative metal foils, metalized polyester, or metalized polyethylene) having a high degree of reflection, wherein the profiled member is made of plastic (metalized plastic sheet material paragraph 9,50). Alderman discloses the plastics can be made by Metalized Products, Inc. of Winchester, Mass, a company that provides for coating, vacuum metalizing and laminating service. As evidenced by *How to Metalize Plastic*, the process of vacuum metallization comprises the steps of: extruding a member made from plastic (plastic component), feeding a vapor-metalized foil (see

aluminum being evaporated in the vacuum chamber) after extrusion towards said membrane, and subjecting said metal-coated foil to a profile molding process (see vacuum metallization). While Alderman does not disclose that the profiled membrane, when comprising the metalized plastic, has a degree of reflection more than .2 (2% reflection), Alderman teaches that the profile membrane can be made of any appropriate reflective surface (paragraph 47), and names aluminum foil as an example of what constitutes a reflective surface. As this one example has a very high reflectivity (see *Alufoil File* as evidence for citing the inherent property of aluminum foil reflectivity being 98%) in order to increase thermal transmission resistance on either side of the plane, it would have been a matter of obvious design choice to use a plastic having similar reflective properties in order to achieve the same thermally insulating properties. Furthermore, the types of plastics named by Alderman are metalized plastics, and the purpose of metalized plastics is to create a high reflectivity.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH A. PLUMMER whose telephone number is (571)272-2246. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A. P./

Examiner, Art Unit 3635

/Jessica Laux/

Examiner, Art Unit 3635